



United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

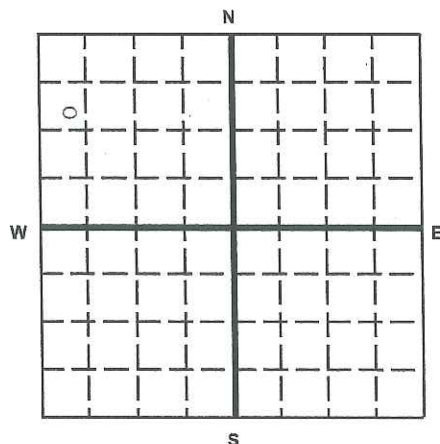
Name and Address of Facility

Michigan Potash Cluster 1

Name and Address of Owner/Operator

Michigan Potash Operating, LLC c/o Fox Rothschild
1225 17th Street, Suite 2200, Denver, CO 80215

Locate Well and Outline Unit on
Section Plat - 640 Acres



State

Michigan

County

Osceola & Mecosta

Permit Number

MI-133-3G-0028

Surface Location Description

SE 1/4 of SW 1/4 of NW 1/4 of NW 1/4 of Section 31 Township 17 Range 8

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface

Location ____ ft. from (N/S) N Line of quarter section 1052'
and ____ ft. from (E/W) W Line of quarter section. 216'

TYPE OF AUTHORIZATION

- ☐ Individual Permit
☒ Area Permit
☐ Rule

Number of Wells 8

Lease Name Michigan Potash

WELL ACTIVITY

- ☐ CLASS I
☐ CLASS II
☐ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☒ CLASS III

Well Number

CASING AND TUBING RECORD AFTER PLUGGING

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☐ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☒ Other

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
7	23	0	8600	8 3/4

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	7"	7"					
Depth to Bottom of Tubing or Drill Pipe (ft)	8600	8050					
Sacks of Cement To Be Used (each plug)	100	1220					
Slurry Volume To Be Pumped (cu. ft.)	147	1793					
Calculated Top of Plug (ft.)	8050	0					
Measured Top of Plug (if tagged ft.)							
Slurry Wt. (Lb./Gal.)	14.2	14.2					
Type Cement or Other Material (Class III)	A	A					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
Cement Retainer at 8,050'			
Perf 8400-8550 GROSS MD	8400	8550	

Estimated Cost to Plug Wells

\$ 289,600

Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title (Please type or print)

Theodore A. Pagano, P.E., P.G., General Manager

Signature

Date Signed

07/27/2016